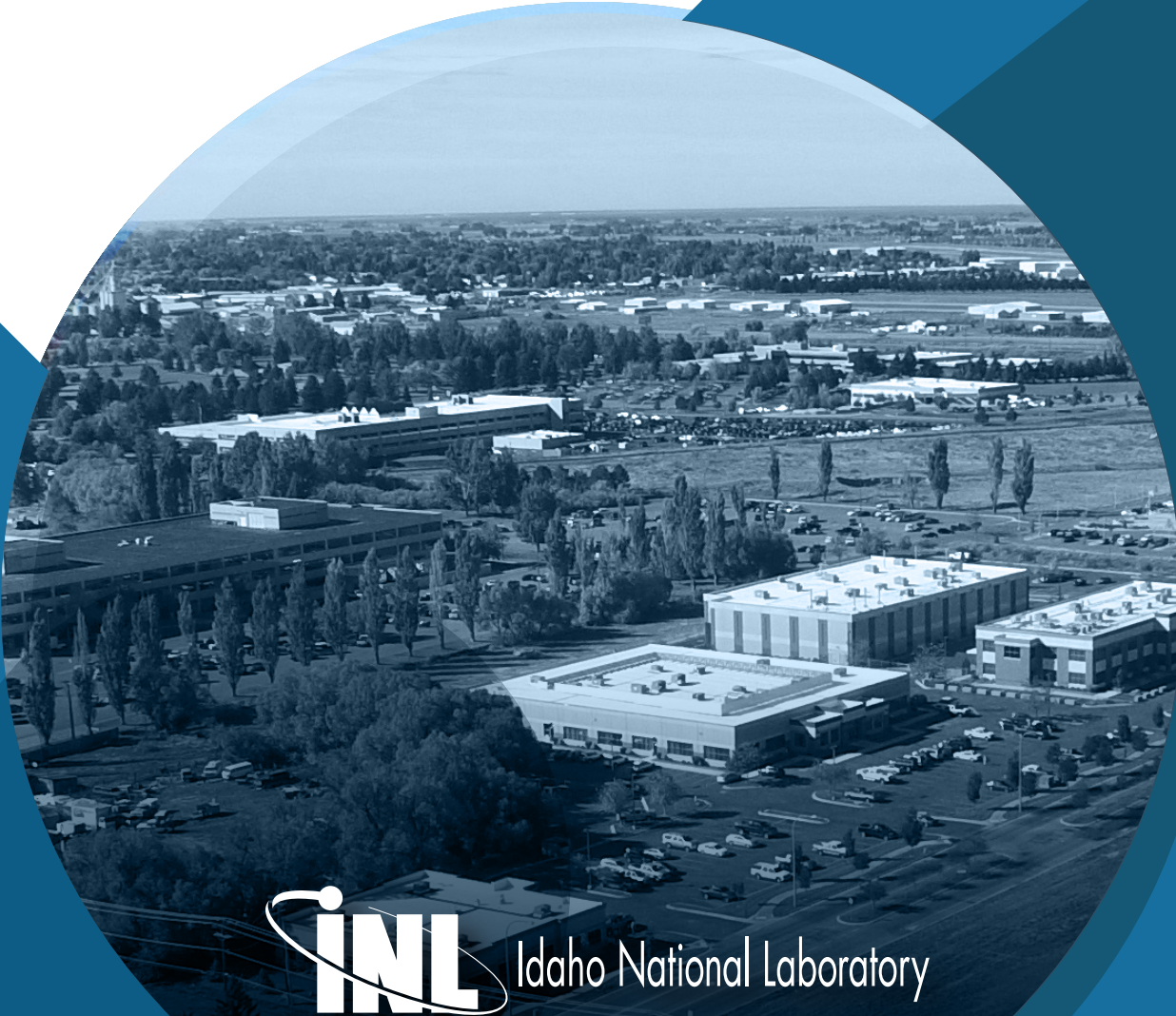


RESEARCH & DEVELOPMENT

ECONOMIC IMPACT SUMMARY



Idaho National Laboratory

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“We are proud of the impact INL has throughout Idaho. A robust economy helps build strong communities, and all of us at Idaho’s national laboratory strive to be a force for good in our state.”

- Mark Peters

Result SUMMARY

As one of the largest employers in Idaho, Idaho National Laboratory (INL) provides a significant impact on Idaho’s economy. Employment for INL during fiscal year (FY) 2019 was over 4,600, making it Idaho’s sixth-largest private employer and ninth-largest employer when compared to all public and private businesses. INL’s total output impact improved by nearly \$584 million – a 28.4% increase – between FY 2018 and FY 2019. As INL continues to develop and grow, so does Idaho’s economy. A more developed economy provides an enhanced opportunity for the state of

Idaho to capture economic benefits from INL’s presence. Dually beneficial economic activity between INL and supporting businesses becomes increasingly possible.

INL is one of the U.S. Department of Energy’s (DOE’s) 17 national laboratories. The laboratory performs work in each of DOE’s strategic goal areas: energy, national security, science and environment. INL is the nation’s center for nuclear energy research and development. Day-to-day management and operation of the laboratory is the responsibility

of Battelle Energy Alliance (BEA). This study evaluates the total economic impact INL operations have on Idaho's economy. The economic impacts identified in this study only include INL operations managed by BEA and not the impact of other DOE contractors, DOE itself, or the Naval Reactors Facility.

Economic impacts are separated into the following three categories: the direct impact, composed of operational expenditures made by INL; indirect impacts, which are the result of interindustry trade between INL and suppliers of goods and services within Idaho; and induced impacts, created by household spending income earned directly or indirectly from INL operations. Total economic impact is the combination of all three impact categories. Combining INL operations with additional indirect and induced impacts, the company adds \$2.64 billion to total output and more

than 14,800 to employment in Idaho. The table below summarizes the impacts. Other important impacts include the following:

- INL's total output impact increased by nearly \$584 million between FY 2018 and FY 2019 – a 28.4% increase
- INL's total output impact increased by 87% between 2014 and 2019
- The total employment impact of INL operations accounts for 2% of Idaho's covered employment
- INL directly employed 4,660 workers in Idaho; secondary effects in Idaho accounted for an additional 10,216 jobs for a total of 14,876 jobs – a 26.2% increase from FY 2018
- INL total employment impacts increased by 72.7% between 2014 and 2019

- INL brought money into Idaho and generated additional value-added output of nearly \$1.7 billion
- INL accounted for more than 3.4% of statewide economic output
- Nearly \$1.3 billion of economic output was generated through INL suppliers and employee household spending
- INL increased personal income in the state by \$1.24 billion
- INL economic impacts accounted for 1.6% of all personal income in the state
- Average base salary of an INL employee in FY 2019 was \$100,485 annually, up from \$97,893 in FY 2018
- BEA subcontracted \$222 million to Idaho businesses
- BEA corporate office contributed more than \$674,000 in charitable giving

Impact TYPE	EMPLOYMENT ^a	LABOR INCOME ^b	VALUE ADDED ^c	OUTPUT ^d
Direct Effect	4,660	\$815,802,319	\$972,388,820	\$1,349,117,147
Indirect Effect	4,433	\$188,299,324	\$302,885,207	\$546,848,749
Induced Effect	5,783	\$232,665,771	\$410,909,655	\$746,864,476
Total Impact	14,876	\$1,236,767,414	\$1,686,183,682	\$2,642,830,372
Multiplier	3.19	1.52	1.73	1.96

^aEmployment — The number of jobs created or sustained

^bLabor Income — The amount of income including employee compensation (wages and benefits) and proprietor income

^cValue Added — The value of a combination of innovation and improvement made as basic resources and intermediate goods are processed into final goods

^dOutput — The value of industry output or contributions to state gross domestic output

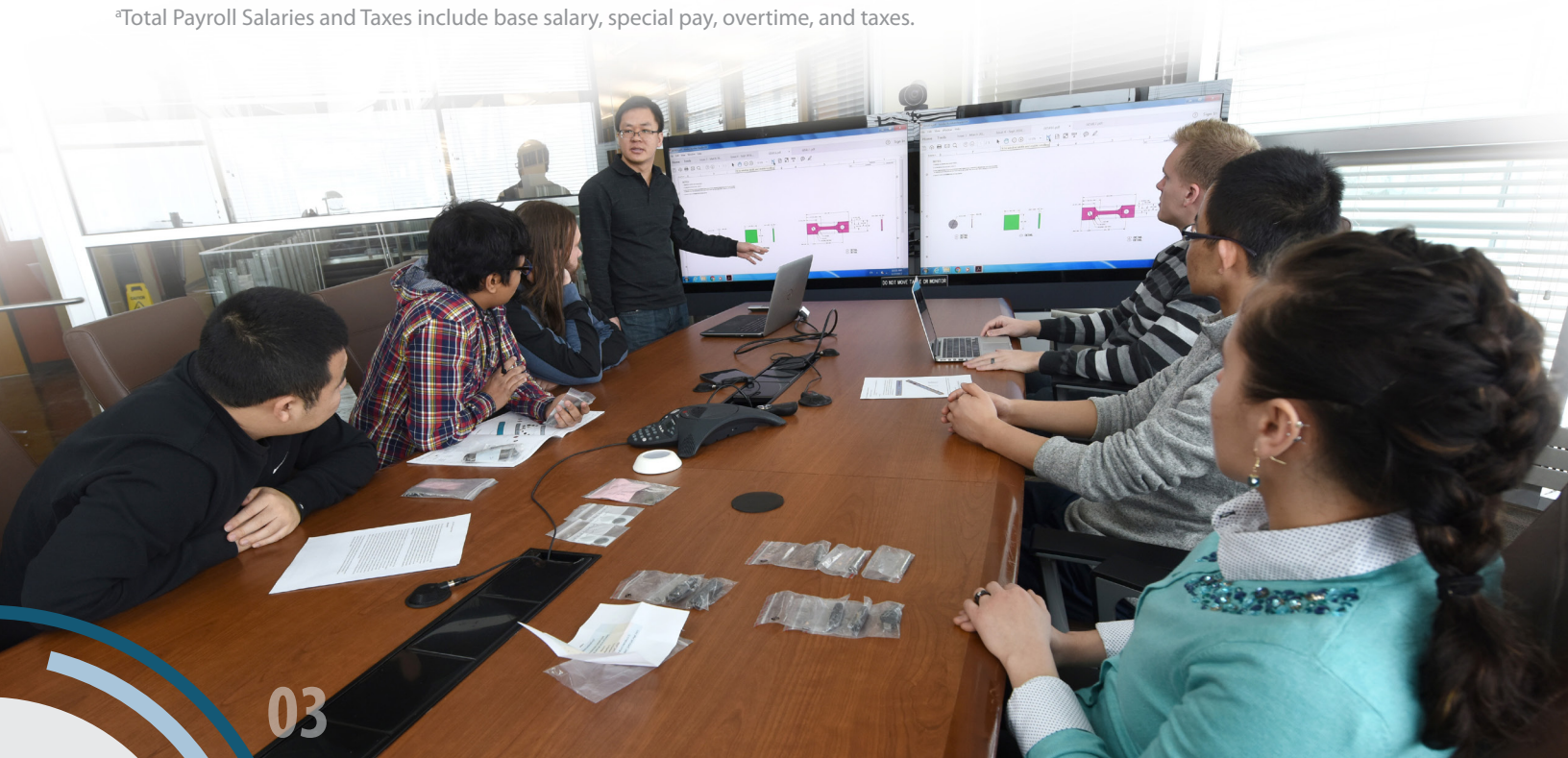
Direct EFFECTS

Direct effects include total operating expenses such as the purchase of goods and services, taxes, education reimbursements, and payments to employees. These direct effects for FY 2019 account for nearly \$1.35 billion (see table below). Payments to employees can be broken down into payment of wages and salaries, and employee benefits.

To improve the accuracy of the economic impact model, INL operations and expenditures were analyzed according to the department or directorate where the expenses were incurred. Direct effects were aggregated according to industry and directorate similarities, creating a series of industry categories that more closely represents INL operations.

Expense TYPE (In Millions)	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	'18-'19 Chg	% Chg
Goods and Services	\$394	\$433	\$512	\$431	\$322	\$524	\$202	63%
Payroll Benefits Medical	\$46	\$53	\$62	\$67	\$69	\$78	\$9	13%
Payroll Benefits Retirement	\$38	\$47	\$63	\$57	\$67	\$60	-\$7	-10%
Payroll Salaries ^a	\$355	\$384	\$397	\$445	\$631	\$687	\$56	9%
Grand Total	\$833	\$917	\$1,034	\$1,000	\$1,089	\$1,349	\$260	24%

^aTotal Payroll Salaries and Taxes include base salary, special pay, overtime, and taxes.



IMPACT ON TOTAL

Output

In FY 2019, INL operations added \$2.64 billion to Idaho's gross economic output. This represents more than 3.4% of Idaho's total output or gross state product. This comes as a result of the direct effects of INL operations being multiplied through the economy. During FY 2019, INL contracted to purchase more than \$222 million worth of goods and services with Idaho businesses. According to the economic impact model and the presence of potential supporting businesses, the actual indirect impact of INL operations could reach \$547 million. INL employees' spending creates an additional induced effect of nearly \$747 million on Idaho's economy. For every \$100 in direct economic activity at INL, an additional \$96 of activity is created or sustained throughout the state's economy. This results in an output multiplier of 1.96. INL total output impacts increased by 87% between 2014 and 2019. See Figure 1 for an illustration of INL's impact on total output.

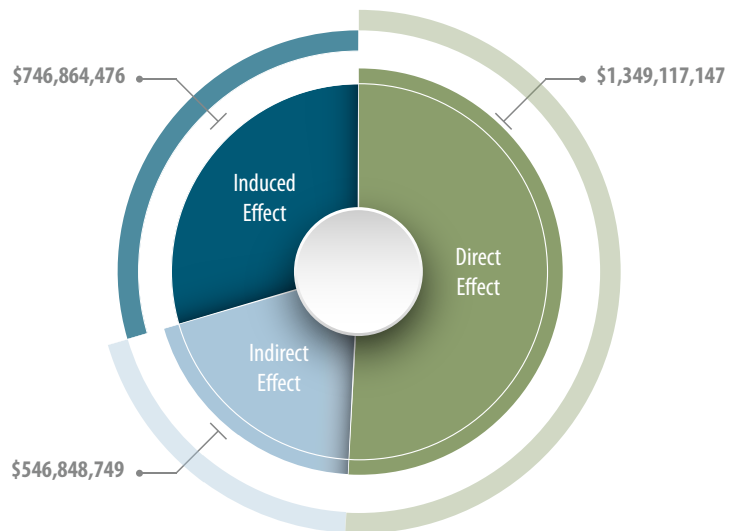


FIGURE 1. Impact on Total Output: \$2.64 Billion

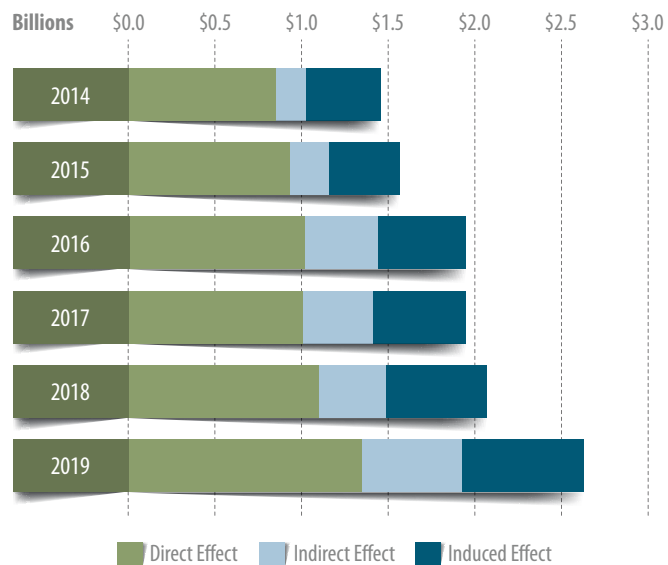


FIGURE 2. INL Economic Impacts: FY 2014-2019

\$2.64 BILLION

INL GROSS
economic output in FY 2019

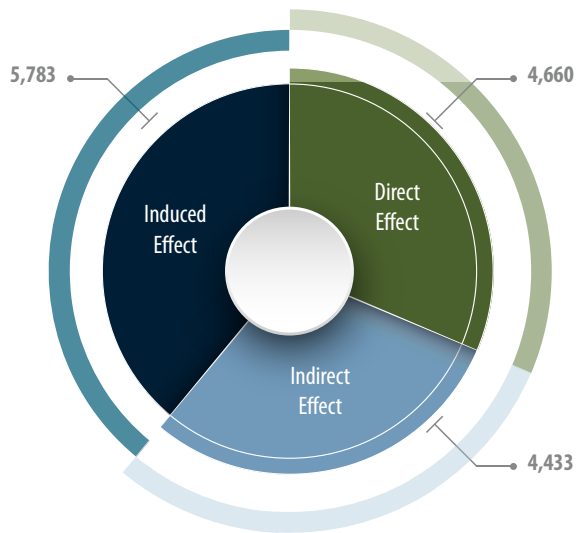


FIGURE 3. Impact on Employment: 14,876

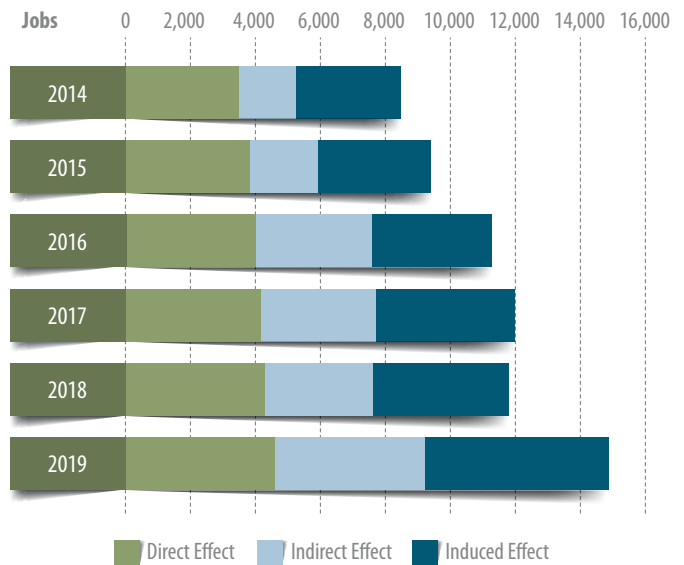


FIGURE 4. Historical Employment Impacts

IMPACT ON **Employment**

INL's average employment for FY 2019 was 4,660. An additional 4,433 jobs are created or sustained by industries that support INL operations. INL employee spending creates or sustains an additional 5,783 jobs throughout Idaho. The combined employment impact accounts for

14,876 jobs. For every 100 INL jobs created, an additional 219 jobs are created or sustained throughout Idaho. Total employment impacts increased by nearly 33% between 2014 and 2019. See Figure 3 for an illustration of INL's impact on employment.

4,660

INL EMPLOYEES

average for FY 2019

IMPACT ON LABOR

Income

INL's impact on Idaho's total labor income for FY 2019 was nearly \$1.24 billion — or 1.6% of Idaho's total personal income. Total labor income includes wages and salaries, employee benefits, and payroll taxes. The total income

for employees of industries that support INL operations were more than \$188 million. INL employees' household spending patterns generated \$232.6 million in employee compensation for individuals employed by Idaho

businesses. The average base salary of an INL employee was \$100,485. Labor income impacts increased by nearly 15% between 2014 and 2019. See Figure 5 for an illustration of INL's impact on labor income.

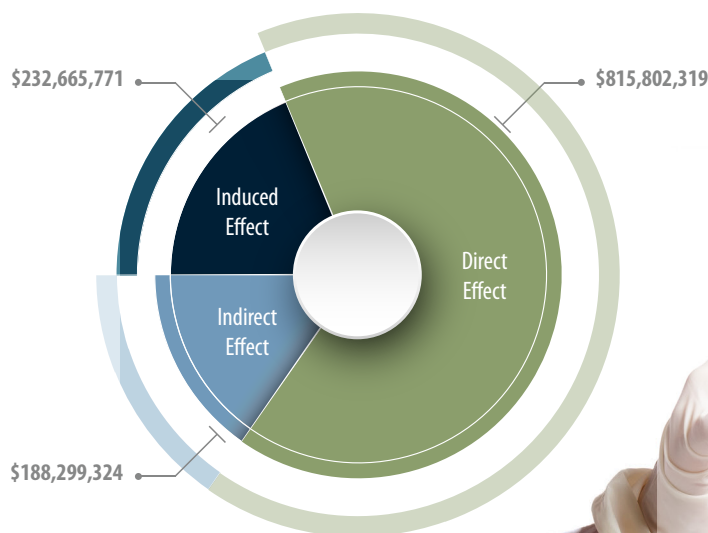


FIGURE 5. Impact on Labor Income: \$1.24 Billion

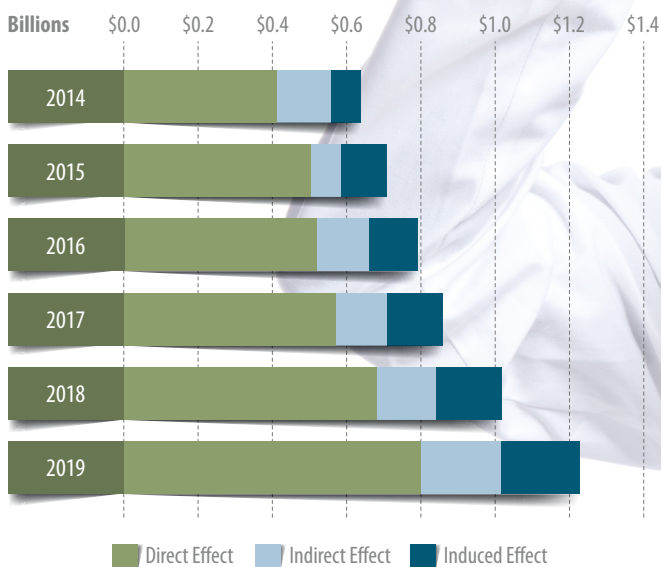


FIGURE 6. Historical Labor Income Impact



Value-Added IMPACT

Value-added impacts are created by a combination of innovation and improvement made as basic resources and intermediate goods are processed into final goods. Service-related production also added significant value to the economy. INL directly added nearly \$972 million of value to Idaho. Industries that supported INL

indirectly added nearly \$303 million of value to Idaho. Induced value-added impacts resulted in more than \$747 million in economic activity. The total value-added impact was nearly \$1.69 billion. Value-added impacts increased by nearly 87% between 2014 and 2019. See Figure 7 for an illustration of INL's value-added impact.

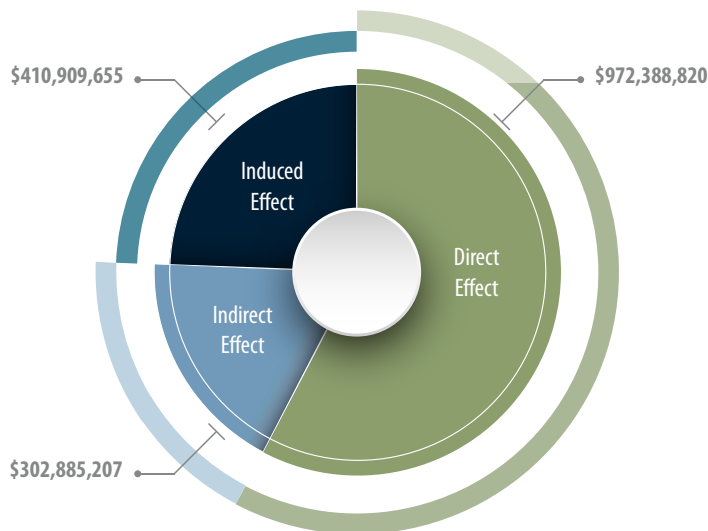


FIGURE 7. Impact on Value Added: \$1.69 Billion

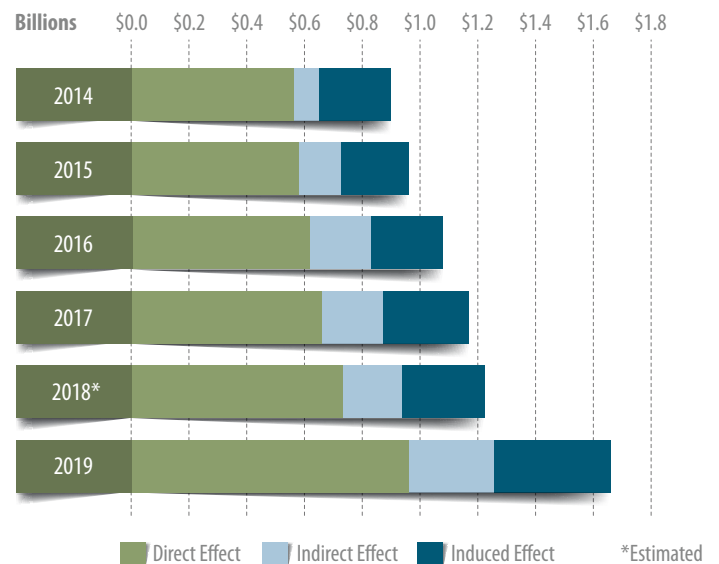


FIGURE 8. Historical Value-Added Impact



INL TOTAL IMPACT COMPARISON

INL's increased economic activity in FY 2019 led to a \$584 million or 28.4% increase in output when compared to FY 2018. This resulted in a net change of 3,087 jobs throughout Idaho. Added employment at INL and supporting business fueled growth

in labor income by almost \$202 million – a 19.5% increase over FY 2018. The combined value-added impact of innovation at INL and supporting businesses improved by more than \$451 million or 36.5% from FY 2018 to FY 2019.

Impact TYPE	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	'18-'19 Chg	% Chg
Output	\$1,414	\$1,584	\$1,908	\$1,935	\$2,059	\$2,643	\$584	28.4%
Value Added	\$903	\$942	\$1,085	\$1,160	\$1,236	\$1,686	\$451	36.5%
Labor Income	\$661	\$703	\$795	\$862	\$1,035	\$1,237	\$202	19.5%
Employment	8,615	9,293	11,276	12,027	11,789	14,876	3,087	26.2%

MULTIPLIERS

- **Output Multiplier** – INL's output multiplier was 1.96, which means that for every \$100 of direct impact added by INL operations, an additional \$96 dollars will be generated throughout the Idaho economy.
- **Employment Multiplier** – INL's employment multiplier is 3.19, which means that an addition of 100 employees to INL's payroll will result in an additional 219 created throughout the Idaho economy.
- **Labor Income Multiplier** – INL's labor income multiplier is 1.52, which means that if INL employee compensation were to increase by \$100, then an additional \$52 in employee compensation would be added to the Idaho economy.
- **Value-Added Multiplier** – INL's value-added multiplier is 1.73, which means that if value added by INL to the production of final goods and services were to increase by \$100, then an additional \$73 in value would be added to the Idaho economy.





Idaho National Laboratory